	Application No.	Applicant(s)
Notice of Allowability	09/749,193	TANG, HARRY
	Examiner	**Art Unit**	
	Anthony T Ton	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amendment filed on 6/24/2004*.

2. ☒ The allowed claim(s) is/are *10,13,14,18-20 and 22-27; now the claims have been renumbered and become 1-12, respectively*.

3. ☒ The drawings filed on *6/24/04* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

PHIRIN SAM
PRIMARY EXAMINER

DETAILED ACTION

1.   The following is an examiner's statement of reasons for claim re-numbering:

Based on the Amendment filed on **6/24/2004**, the **Applicants canceled claims 1-9, 11,**

12, 15-17 and 21; therefore, **claims 10, 13, 14, 18-20 and 22-27** have been renumbered and

become **1-12**, respectively.

Allowable Subject Matter

2.   The following is an examiner's statement of reasons for allowance:

a) **Claim 1** (after renumbering) is allowed because the prior art fails to teach a

combination, other claim limitations, a system to optimize resource planning for asynchronous

digital subscriber line (ADSL) services comprising:

managing deterministic resource configuration variables that are used to create permanent

virtual circuits (PVCs) on the ADSL;

a network management system (NMS) uses the deterministic configuration variables to

reanimate hung PVCs; and

the NMS cooperates with an element management system (EMS) to communicate

information indicative of the hung PVCs to ADSL network components such that the ADSL

network components can reanimate the hung PVCs, the NMS calculating the deterministic

variables using the computing application to ascertain the connection positions of the PVC on the

ADSL network components.

b) **Claims 2 and 3** (after renumbering) are allowed because the prior art fails to teach a

combination, other claim limitations, a method to optimize resource of ADSL network providing

ADSL services comprising:

storing deterministic configuration variables used in the provisioning of resources on an

ADSL network by providing a computing application to operate on a network management

system, the computing application:

creating, managing, and communication deterministic configuration variables to

cooperating ADSL network components for the provisioning of resources; and

calculating a virtual circuit identifier (VCI) value, the VCI value being calculated

using a plurality of ADSL component configuration data comprising any of connection

position information, port information, and sequence position information.

c) **Claims 4 and 5** (after renumbering) are allowed because the prior art fails to teach a

combination, other claim limitations, a method to provision resources on the ADSL network

comprising the steps of:

calculating deterministic configuration variables by a network management system

(NMS), by determining at least one remote access multiplexer (RAM) and at least one central

office digital subscriber line access multiplexer (CO DSLAM) configuration values for inclusion

in providing the deterministic configuration variables; and

communicating the calculated deterministic configuration variables to the ADSL network

by the NMS using the EMS, the EMS being communicatively coupled to the RAM and CO

DSLAM.

d) **Claim 6** (after renumbering) is allowed because the prior art fails to teach a

combination, other claim limitations, a method to provision resources on the ADSL network

comprising the steps of:

calculating deterministic configuration variables by a network management system

(NMS), by determining the capacity of at least one remote access multiplexer (RAM) and at least

one central office digital subscriber line access multiplexer (CO DSLAM) to ascertain the range

of values for the deterministic configuration values for communication by the NMS, and

choosing a formula associated with the determined capacity for use in calculating the

deterministic configuration values; and

communicating the calculated deterministic configuration variables to the ADSL network

by the NMS using the EMS, the EMS being communicatively coupled to the RAM and CO

DSLAM.

e) **Claims 7-12** (after renumbering) are allowed because the prior art fails to teach a

combination, other claim limitations, a method of assigning virtual circuit identifier (VCI) values

to a subscriber comprising the steps of:

assigning a sequence number, n, to a remote access multiplexer (RAM), the sequence

number being based on a digital subscriber line access multiplexer input port position to which

the RAM is connected;

assigning a position number, Mpos, to the RAM, the position number being in a range

beginning with the number zero, the position number being based on a RAM input port to which

a subscriber is connected;

determining the number of ports, P, on the RAM;

computing the value of $(P * (n-1)) + Mpos$; and

assigning a VCI value for the subscriber based on the computed value.

Examiner Information

3.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Anthony T Ton** whose telephone number is **571-272-3076**. The

examiner can normally be reached on M-F: 8:00 am - 4:30 pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Ken Vanderpuye** can be reached on **571-272-3078**. The fax phone number for the

organization where this application or proceeding is assigned is **571-273-3076**.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ATT

9/30/04

PHIRIN SAM
PRIMARY EXAMINER